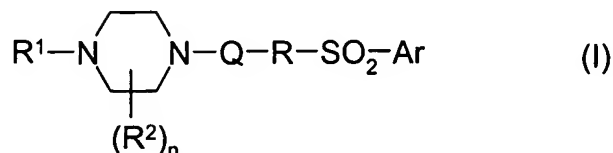


In the claims:

1. (Currently Amended) An N-[(piperazinyl)hetaryl]arylsulfonamide compound of the general formula I



in which

- R is oxygen, a group N-R³ or a group CR^{3a}R^{3b};
- Q is a bivalent, 6-membered heteroaromatic radical ~~which possesses 1 or 2 N atoms as ring members~~ selected from pyridindiyl and pyrimidindiyl, and which optionally carries one or two substituents R^a which is/are selected, independently of each other, from halogen, CN, NO₂, CO₂R⁴, COR⁵, C₁-C₄-alkyl, C₁-C₄-alkoxy, C₁-C₄-haloalkyl, NH₂, NHR⁶, NR⁶R⁷ and C₁-C₄-haloalkoxy;
- Ar is phenyl or a 6-membered heteroaromatic radical ~~which possesses 1 or 2 N atoms as ring members~~ selected from pyridinyl and pyrimidinyl, and which ~~optionally carries~~ carry one or two substituents R^b, which is/are selected from halogen, NO₂, CN, CO₂R⁴, COR⁵, [NH₂], NHR⁶, NR⁶R⁷, C₁-C₆-alkyl, C₁-C₆-haloalkyl, C₁-C₆-alkoxy, C₁-C₆-haloalkoxy, C₂-C₆-alkenyl, C₂-C₆-alkynyl, C₃-C₆-cycloalkyl, C₃-C₆-cycloalkoxy, C₃-C₆-cycloalkyl-C₁-C₄-alkyl and C₁-C₄-haloalkyl, with it also being possible for two radicals R^b which are bonded to adjacent C atoms of Ar to be together C₃-C₄-alkylene;
- n is 0, 1 or 2;
- R¹ is hydrogen, C₁-C₄-alkyl, C₁-C₄-haloalkyl, C₃-C₆-cycloalkyl, C₃-C₆-cycloalkyl-C₁-C₄-alkyl, C₁-C₄-hydroxyalkyl, C₁-C₄-alkoxy-C₁-C₄-alkyl, C₃-C₄-alkenyl or C₃-C₄-alkynyl;
- R² is C₁-C₄-alkyl or, together with R¹, is C₂-C₅-alkylene or, in the case of n = 2, the two radicals R² can together be C₁-C₄-alkylene;

R³ is hydrogen or C₁-C₄-alkyl;

R^{3a}, R^{3b} are, independently of each other, hydrogen or C₁-C₄-alkyl;

R⁴ is C₁-C₄-alkyl, C₁-C₄-haloalkyl, C₂-C₄-alkenyl C₃-C₆-cycloalkyl, C₃-C₆-cycloalkyl-C₁-C₄-alkyl, phenyl or benzyl; and

R⁵ is hydrogen, C₁-C₄-alkyl, C₁-C₄-haloalkyl, C₂-C₄-alkenyl C₃-C₆-cycloalkyl, C₃-C₆-cycloalkyl-C₁-C₄-alkyl, phenyl or benzyl;

R⁶, R⁷ are each independently selected from C₁-C₄-alkyl, C₁-C₄-haloalkyl or together with the nitrogen to which they are bound form a saturated 3-, 4-, 5- or 6-membered heterocycle, which additionally may comprise an oxygen atom or an additional nitrogen atom as a ring member and which may carry 1, 2, 3 or 4 C₁-C₄ alkyl groups;

the N-oxides thereof and the physiologically tolerated acid addition salts of these compounds;

with the exception of the compounds: 4-methyl-N-[6-(4-methylpiperazin-1-yl)pyridin-3-yl]benzenesulfonamide and 4-chloro-N-[6-(4-methylpiperazin-1-yl)pyridin-3-yl]benzenesulfonamide.

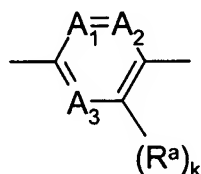
2. (Original) The compound as claimed in claim 1, wherein R is N-R³ with R³ being H or C₁-C₄-alkyl.
3. (Currently Amended) The compound as claimed in claim 2, wherein

Q is a bivalent, 6-membered heteroaromatic radical ~~which possesses 1 or 2 N atoms as ring members~~ selected from pyridindiy and pyrimidindiy, and which optionally carries one or two substituents R^a which is/are selected, independently of each other, from halogen, CN, NO₂, CO₂R⁴, COR⁵, C₁-C₄-alkyl and C₁-C₄-haloalkyl and

Ar is phenyl or a 6-membered heteroaromatic radical ~~which possesses 1 or 2 N atoms as ring members~~ selected from pyridinyl and pyrimidinyl, and which ~~optionally carries~~ carry one or two substituents R^b, which is/are selected from halogen, NO₂, CN, CO₂R⁴, COR⁵, C₁-C₆-alkyl, C₂-C₆-alkenyl, C₂-C₆-alkynyl, C₃-C₆-cycloalkyl, C₃-C₆-

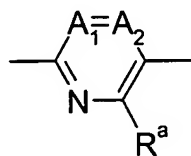
cycloalkyl-C₁-C₄-alkyl and C₁-C₄-haloalkyl, with it also being possible for two radicals R^b which are bonded to adjacent C atoms of Ar to be together C₃-C₄-alkylene.

4. (Original) The compound as claimed in claim 1, in which the piperazine ring is bonded to the heteroaromatic radical Q in the para position in relation to the group R-SO₂-Ar.
5. (Currently Amended) The compound as claimed in one of the preceding claims, in which Q is a radical of the formula



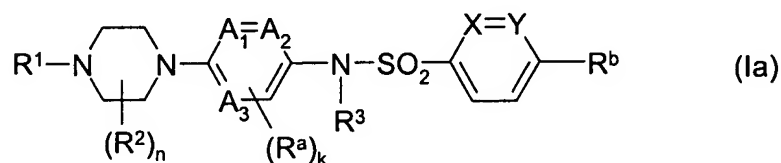
~~in which A₁, A₂ and A₃ are, independently of each other, N or CH, one or two of the variables A₁, A₂ and A₃ can also be C-R^a, one of the variables A₁, A₂, or A₃ is N, the remaining two variables being CH or C-R^a, or A₁ and A₃ are N and A₂ is CH or C-R^a, k = 0 or 1 and R^a is selected from halogen, C₁-C₄-alkyl, C₁-C₄-haloalkyl, C₁-C₄-alkoxy, NH₂, NHR⁶, NR⁶R⁷ and C₁-C₄-haloalkoxy, with A₁, A₂ and A₃ not simultaneously being N or simultaneously being selected from CH and C-R^a with the proviso that k is 0 if two of the variables A₁, A₂ and A₃ are C-R^a.~~

6. (Original) The compound as claimed in claim 5, in which A₃ is nitrogen, A₂ is CH and A₁ is N or CH and wherein the piperazine radical is located in the 2 position.
7. (Original) The compound as claimed in claim 6, in which Q is pyridin-2,5-diyl which carries the piperazine radical in the 2 position.
8. (Currently Amended) The compound as claimed in claim 6, in which Q is a radical of the formula



in which ~~A₁ and A₂ are, independently of each other, N or CH~~ A₁ is N or CH and A₂ is CH and R^a is selected from , C₁-C₄-alkoxy, NH₂, NHR⁶, NR⁶R⁷ and C₁-C₄-haloalkoxy.

9. (Currently Amended) The compound as claimed in claim 8, in which ~~A₁ is N or CH and A₂ is CH~~ and wherein the piperazine radical is located in the 2 position.
10. (Currently Amended) The compound as claimed in one of the preceding claims, in which the radical Ar carries a substituent R^b in the para position and, ~~where appropriate~~ optionally, a further substituent R^b in the meta position or in the ortho position, in each case based on the binding site of the sulfonamide group.
11. (Currently Amended) The compound as claimed in one of the preceding claims, in which Ar is phenyl or pyridyl, which radicals possess, ~~where appropriate~~, one or 2 R^b substituents.
12. (Currently Amended) The compound as claimed in one of the preceding claims, in which R¹ is ~~different from~~ not hydrogen and methyl.
13. (Currently Amended) The compound as claimed in claim 1 of the general formula Ia



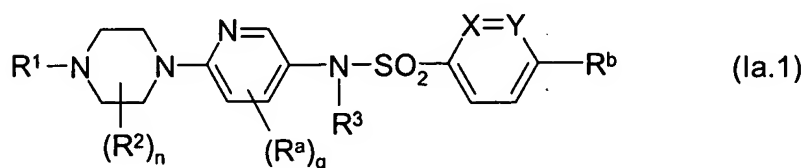
in which n, R¹, R², R³, R^a and R^b have the meanings given in claim 1 and in which ~~either~~

~~A₁, A₂ and A₃ are, independently of each other, N or CH and one or two of the variables~~
A₁, A₂ and A₃ can also be C-R^a one of the variables A₁, A₂ or A₃ is N, the remaining two
variables being CH or C-R^a, or A₁ and A₃ are N and A₂ is CH or C-R^a, with the proviso that
k is 0 if two of the variables A₁, A₂ and A₃ are C-R^a, with A₁, A₂ and A₃ not simultaneously
being N or simultaneously being selected from CH and C-R^a,

X and Y are selected from CH, C-R^{b'} and N, in which R^{b'} is halogen, methyl, CN, difluoromethyl or trifluoromethyl, with X and Y not simultaneously being N or simultaneously being C-R^{b'}, and

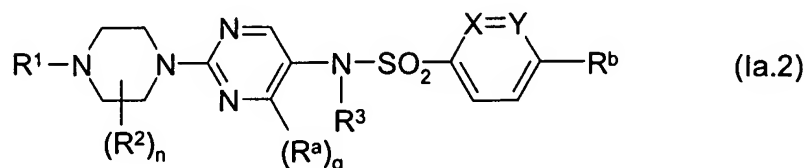
k is 0 or 1.

14. (Currently Amended) The compound of the formula Ia as claimed in claim 13, in which k = 0, ~~with A₁, A₂ and A₃ being, independently of each other, N or CH and A₁, A₂ and A₃ not simultaneously being N or simultaneously being CH~~ and one of the variables A₁, A₂ or A₃ is N, the remaining two variables being CH or A₁ and A₃ are N and A₂ is CH.
15. (Original) The compound of the formula Ia as claimed in claim 14, in which A₁ is CH or N, A₂ is CH and A₃ is N.
16. (Original) The compound of the formula Ia as claimed in claim 13, in which k is 1, A₁ is CH or N, A₂ is CH and A₃ is N, and R^a is selected from , C₁-C₄-alkoxy, NH₂, NHR⁶, NR⁶R⁷ and C₁-C₄-haloalkoxy and R^a is bound to the carbon atom adjacent to A₃.
17. (Original) The compound of the formula Ia as claimed in any of claims 13 to 15, in which n is 0 or 1 and, in the case of n = 1, R² is bonded to the C atom of the piperazine ring which is adjacent to the group R¹-N and is a methyl group having the S configuration.
18. (Currently Amended) The compound of the formula Ia as claimed in one of claims 13 to 16, in which the radical Ar carries a substituent R^b in the para position and, ~~where appropriate~~ optionally, a further substituent R^b in the meta position or in the ortho position, in each case based on the binding site of the sulfonamide group.
19. (Currently Amended) The compound of the formula Ia as claimed in one of claims 13 to 17, in which Ar is phenyl or pyridyl, which radicals possess, ~~where appropriate~~, one or 2 R^b substituents.
20. (Currently Amended) The compound of the formula Ia as claimed in one of claims 13 to 18, in which R¹ is ~~different from~~ not hydrogen and methyl.
21. (Original) The compound of the formula Ia as claimed in one of claims 13 to 19, of the general formula Ia.1



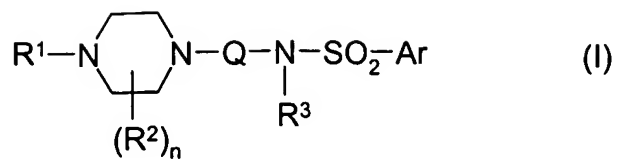
in which n, X, Y, R¹, R², R³, R^a and R^b have the meanings given in claim 13 and q is 0, 1 or 2.

22. (Original) The compound of the formula Ia as claimed in one of claims 13 to 19, of the general formula Ia.2



in which n, X, Y, R¹, R², R³, R^a and R^b have the meanings given in claim 13 and q is 0 or 1.

23. (Currently Amended) A pharmaceutical composition which comprises at least one N-[(piperazinyl)hetaryl]arylsulfonamide compound as claimed in one of claims 1 to 22 and/or at least one physiologically tolerated acid addition salt of I and/or an N-oxide of I, ~~where appropriate~~ optionally together with physiologically acceptable carriers and/or auxiliary substances.
24. (Previously Cancelled).
25. (Previously Cancelled).
26. (Cancelled).
27. (Currently Amended) A method for treating a medical disorder susceptible to treatment with a dopamine D₃ receptor antagonist or a dopamine D₃ agonist selected from Parkinson's disease, schizophrenia, cognitive disturbances, depression, anxiety, addiction, kidney function disturbances, eating disturbances and epilepsy, said method comprising administering an effective amount of at least one compound of the formula I



in which Q, Ar, n, R¹, R² and R³ have the previously mentioned meanings, or the N-oxides thereof or the physiologically tolerated acid addition salts thereof to a subject in need thereof.

28. (Cancelled).